Please type a plus sign (+) inside this box -> [+]

Signature

PTO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF GOMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

		Application Number	09/479,783		
TRANSMITTAL FORM be used for all correspondence after in		Filing Date	January 7, 2000		
∰ FORM		First Named Inventor	Stanley T. Crooke		
be used for all correspondence after in	itial filing)	Group Art Unit	1635		
		Examiner Name	Sean McGarry		
Total Number of Pages in This Submission		Attorney Docket Number	ISIS0002-102 (ISIS-4313)		
	ENCLO	OSURES (check all that apply)			
Fee Transmittal Form		ment Papers Application)	After Allowance Communication to Group		
Fee Attached	☐ Drawin	g(s)	Appeal Communication to Board of Appeals and Interferences		
Amendment / Response	Licensi	ng-related Papers	Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)		
☐ After Final	Petition	1	Proprietary Information		
Affidavits/declaration(s)		n to Convert to a onal Application	Status Letter		
Extension of Time Request		of Attorney, Revocation e of Correspondence Address	Other Enclosure(s) (please identify below):		
Express Abandonment Request		al Disclaimer st for Refund	Form PTO/SB/08a and Form PTO/SB/08b; Copy of (3) Cited References; and,		
Supplemental Information Disclosure Statement		umber of CD(s)	International Search Report Dated August 23, 2004 for International Application No. PCT/US03/09808.		
Certified Copy of Priority Document(s)	Rema	rks			
Response to Missing Parts/ Incomplete Application					
Response to Missing Parts under 37 CFR 1.52 or 1.53					
SIGNA	TURE OF	APPLICANT, ATTORNEY, C	OR AGENT		
Firm or Individual name	h.D., Regist	ration No. 38,534			
Signature P	10				
Date 14 Str75m son 2004					
	CE	RTIFICATE OF MAILING			
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this date:					
Typed or printed name Paul K. Legaard, Ph.D., Registration No. 38,534					
Signature Date 14 Japanson 2014					

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be send to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Complete If Known

Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL

First Named Inventor Sanal My T. Crooke Sana My T. Crooke S	I LL IKANSIIII IAL	Application Number 09/479,783						
## First Named Inventor Applicant claims small entity status. See 37 CFR 1.27 Applicant claims small entity status. See 37 CFR 1.27 At Unit	for FY 2004	Filing I	Date		Janu	anuary 7, 2000		
Applicant claims small entity status. See 37 CFR 1.27		First N	amed In	ventor	Stant	ey T. Crooke		
Check	Effective 10/01/2003. Patent fees are subject to annual revision.	Exami	ner Nam	e	Sean	McGarry		
Check	Applicant claims small entity status. See 37 CFR 1.27	Art Un						
Check Gradit card Money Order Other None Deposit Account Deposit Account Surprise	TAL AMOUNT OF PAYMENT (\$) 180.00	Attorne	ey Docke	t No.	ISISC	0002-102 (129903)		
Check Gradit card Money Order Other None Deposit Account Deposit Account Surprise	METHOD OF PAYMENT (check all that apply)				FEE C	ALCULATION (continued)		
Deposit Account	INCHIOS OF FATHER (Should in the Lappy)	3. AD	DITION	AL FE				
Deposit Account Sol-1275 So	 	Large	Entity	Small E	intity			
Account Number Sol-1275 Sol	Denocit					Fee Description Fe	e Paid	
Deposit Account Cozen O'Cornor, P.C. Substitute		1051		2051		Surcharge - late filing fee or oath		
Account Name	Number	1052	50	2052	25			
Name						_ ·		
The Director is authorized to: (check all that apply)		1	•			• •		
Second Content Conte	The Director is authorized to: (check all that apply)		920°	1804	920*			
1. BASIC FILING FEE 1253 1254 1.480 2254 1.480 2254 1.480 2254 1.480 1	□ Charge any additional fee(s) during the pendency of this application				·	Examiner action		
Packed P		1				` *		
The part of the		1252	420	2252	210			
Pee Fee	1. BASIC FILING FEE					· · ·		
Code (\$) Code (\$) Code (\$) Fee Pald 1255 2,010 2255 1,005 Extension for reply within fith month 1001 1770 2001 385 Utility filing fee 1402 330 2403 145 Notice of Appeal 1403 290 2403 145 Notice of Appeal 1403 290 2403 145 Request for oral hearing 1405 1303 2403 145 Request for oral hearing 1405 1303 2403 145 Request for oral hearing 1405 1303 2403 145 1510 1451 1,510 1		1254	1,480	2254	740			
1002 340 2002 170 2014 385 2003 265 Plant filing fee 1403 290 2403 145 Request for oral hearing 1403 1451 1,510 1,510 1451 1,510 1,510 1451 1,510 1,510 1,510					-	```		
1003 530 2003 265 Plant filing fee 1451 1,510 1451	1001 770 2001 385 Utility filing fee					· · · · · · · · · · · · · · · · · · ·		
1004 770 2004 385 Reissue fling fee 1451 1,510 145		1						
1452 110 2452 55 Petition to revive - unavoidable 1453 1,330 2453 665 Petition to revive - unavoidable 1453 1,330 2453 665 Petition to revive - unavoidable 1453 1,330 2453 665 Petition to revive - unavoidable 1453 1,330 2453 665 Petition to revive - unavoidable 1501 1,330 2503 665 Petition to revive - unavoidable 1501 1,330 2503 665 Petition to revive - unavoidable 1501 1,330 2503 665 Petition to revive - unavoidable 1501 1,330 2503 25	`` 					Petition to institute a public use		
SUBTOTAL (1) (5) 0	1005 160 2005 80 Provisional filling fee	1452	110	2452	55	· · · · · · · · · · · · · · · · · · ·		
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE Extra Fee from Fee below Paid Independent Claims	SUBTOTAL (4)							
Extra Fee from Fee Delow Paid Submission of Information Disclosure Submission of I	308101AE(1)			2501	665	Utility issue fee (or reissue)		
Total Claims		1502	480	2502	240	Design issue fee		
Total Claims	<u> </u>	1503	640	2503	320	Plant issue fee		
Independent Claims		1460		1460		<u> </u>		
Multiple Dependent Large Entity Small Entity Fee Fee Fee Fee Fee Fee Fee Code (\$) C		1807	50	1807	50	· ' '		
Dependent Large Entity Small Entity Fee Fee Fee Fee Fee Fee Code (\$) Code (\$) 1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent claims in excess of 3 1204 86 2204 43 "Reissue independent claims over original patent "Reissue daims in excess of 20 and over original patent 1205 18 2205 9 "Request for Continued Examination (RCE) SUBTOTAL (2) (\$) SUBTOTAL (2) (\$) SUBMITTED BY Registration No. (Attomey/Agent)		1806	180	1806	180	Stmt	180	
Fee Fee Fee Code (\$) Code (\$) Fee Description 1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent claims, if not paid 1204 86 2204 43 "Reissue independent claims over original patent "Reissue claims in excess of 20 and over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent SUBTOTAL (2) (\$) *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 180 **Or number previously paid, if greater, For Reissues, see above SUBMITTED BY Registration No. (Attorney/Agent) Registration No. (Attorney/Agent) Registration No. (Attorney/Agent) 1809 770 2809 385 Filing a submission after final rejection (37 CFR § 1.129(a)) 1810 770 2810 385 For each additional invention to be examined (37 CFR § 1.129(b)) 1801 770 2801 385 Request for Continued Examination (RCE) 1802 900 1802 900 Request for expedited examination of a design application Other fee (specify): *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 180 **Or number previously paid, if greater, For Reissues, see above	Dependent ^	8021	40	8021	40	change of name document per		
1202 18 2202 9 Claims in excess of 20 1201 86 2201 43 Independent claims in excess of 3 1203 290 2203 145 Multiple dependent claims over original patent 1204 86 2204 43 "Reissue independent claims over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent SUBTOTAL (2) (\$) SUBTOTAL (2) (\$) SUBMITTED BY Registration No. (Attorney/Agent) Registration No. (Attorney/Agent) Registration No. (Attorney/Agent) 1810 770 2810 385 For each additional invention to be examined (37 CFR § 1.129(b)) 1801 770 2801 385 Request for Continued Examination (RCE) 1802 900 1802 900 Request for expedited examination of a design application Other fee (specify): Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 180 Complete (if epplicable)	Fee Fee Fee Fee Description	1809	770	2809	385	Filing a submission after final rejection		
1203 290 2203 145 Multiple dependent claim, if not paid 1204 86 2204 43 "Reissue independent claims over original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent SUBTOTAL (2) (\$) SUBTOTAL (2) (\$) The duced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 180 SUBMITTED BY Registration No. (Attorney/Agent)	1202 18 2202 9 Claims in excess of 20	1810	770	2810	385	For each additional invention to be		
1204 86 2204 43 original patent 1205 18 2205 9 "Reissue claims in excess of 20 and over original patent SUBTOTAL (2) (\$) "or number previously paid, if greater, For Reissues, see above SUBMITTED BY Registration No. (Attorney/Agent) Registration No. (Attorney/Agent) Registration No. (Attorney/Agent) 38,534 Request for expedited examination of a design application Other fee (specify): "Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 180 Complete (if applicable) Registration No. (Attorney/Agent) 38,534 Telephone 215-665-6914		1801	770	2801	385	Request for Continued Examination (RCE)		
1205 18 2205 9 "Reissue claims in excess of 20 and over original patent Other fee (specify): SUBTOTAL (2) (\$) "or number previously paid, if greater, For Reissues, see above SUBMITTED BY Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 180 Complete (if epplicable) Registration No. (Attorney/Agent) 38,534 Telephone 215-665-6914	1204 86 2204 43 original patent	1802	900	1802	900			
**Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 180 **Or number previously paid, if greater, For Reissues, see above SUBMITTED BY Registration No. (Altorney/Agent) Registration No. (Altorney/Agent) 38,534 Telephone 215-665-6914			4			• ,,	——	
*Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 180 **Or number previously paid, if greater, For Reissues, see above SUBMITTED BY Complete (if applicable) Name (Print/Type) Paul K. Legaard Registration No. (Attorney/Agent) 38,534 Telephone 215-665-6914	SUBTOTAL (2) (5)	Other fo	ee (specif	y):		l		
SUBMITTED BY Registration No. (Attorney/Agent) Registration No. (Attorney/Agent) 38,534 Telephone 215-665-6914		*Redu	ced by Ba	isic Filin	g Fee P	aid SUBTOTAL (3) (\$) 180		
Name (Print/Type) Paul K. Legaard Registration No. (Attorney/Agent) 38,534 Telephone 215-665-6914	**or number previously paid, if greater, For Reissues, see above						==	
Name (Pnnl/Type) Paul K. Legaard (Attorney/Agent) 38,534 Telephone 215-665-6914					ī	Complete (if epplicable)		
Signature // // Date /4 / ppren open 2 a 1			38,	534	_			
WARNING: Information on this form may become public. Credit card information should not be							2019	

WARNING: Information on this form may become public. Credit card Information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Paternation of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Application of: Crooke

Serial No.: 09/479,783

Group Art Unit: 1635

Filing Date: January 7, 2000

Examiner: Sean McGarry

For: Oligoribonucleotides And Ribonucleases For Cleaving RNA

I certify that this correspondence is being deposited with the U.S. Postal Service as First Class mail in an envelope addressed to the Commissioner for Patents, PO Box 1450, Alexandria, VA, 22313-1450.

on 14 SOUTEMAND LOOY

Paul K. Legaard, Ph.D., Registration No. 38,534

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §§ 1.56 and in accordance with 37 C.F.R. §§ 1.97 and 1.98, information relating to the above-identified application is hereby disclosed, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO Form SB/08A and PTO Form SB/08B, formerly known as PTO Form 1449 submitted herewith.

Inclusion of the information submitted herewith is not to be construed as an admission that the information is material as that term is defined in 37 C.F.R. § 1.56(b).

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

This In	This Information Disclosure Statement is being filed:						
	within	three months of the filing date of the patent application.					
		three months of the date of entry into the national stage as set forth in F.R. § 1.491 of the international application.					
	before	e the mailing date of a first Office Action on the merits.					
	after the mailing date of a first Office Action on the merits, but before the mailing date of a Final Office Action under 37 C.F.R. § 1.116 or a Notice of Allowance under 37 C.F.R. § 1.311, and accordingly is accompanied by:						
		the Statement under 37 C.F.R. § 1.97(e) (see "Statement" below);					
		or					
	\boxtimes	the Fee of \$180.00 set forth in 37 C.F.R. § 1.17(p); or					
		No fee is owed by the applicant(s).					
	In acc	ordance with 37 C.F.R. § 1.129(a), this Information Disclosure					
	Statem	nent is being filed in connection with _ the first or _ second After					
	Final Submission, and accordingly is accompanied by the Statement under 37						
	C.F.R. § 1.97(e) (see "Statement" below) and the fee of \$180.00 as set forth in 37 C.F.R. § 1.17(p), is attached.						
	after t	the mailing date of a Final Office Action under 37 C.F.R. § 1.116 or a					
	Notice	e of Allowance under 37 C.F.R. § 1.311, but before, or simultaneously					
	with, t	the payment of the Issue Fee, and accordingly is accompanied by the					
	Staten	nent under 37 C.F.R. § 1.97(e), a Petition requesting consideration of the					
		nation Disclosure Statement and the Petition Fee of \$130.00 set forth in					
	37 C.F	F.R. § 1.17(i)(1) (see "Statement," "Petition," and "Fees" below).					
\boxtimes	A cop	y of the references listed on the attached PTO Form SB/08a and PTO					
	Form	SB/08b, formerly known as PTO Form 1449 is enclosed. Also enclosed					
		py of the International Search Report Dated August 23, 2004 for					
	International Application No. PCT/US03/09808.						

 \boxtimes

§ 1.17(p) is enclosed herewith.

EXCI	EPT THAT:
	In view of the voluminous nature of reference (a), and the likelihood that this reference is available to the Examiner, copies are not enclosed herewith.
	In accordance with 37 C.F.R. § 1.98(d), copies of the following references listed on the attached PTO Form SB/08A and PTO Form SB/08B, formerly known as PTO Form 1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. § 120 have been made in the instant application.
	If any of the foregoing publications are not available to the Examiner Applicant will endeavor to supply copies at the Examiner's request.
State	ment under 37 C.F.R. § 1.97(e)
	The undersigned attorney hereby states that each item information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the Information Disclosure Statement.
Fees	
	No Fee is owed by the applicant(s).

The Information Disclosure Statement Fee of \$180.00 under 37 C.F.R.

The Petition Fee of \$130.00 under 37 C.F.R. § 1.17(i)(1) is enclosed herewith.

vietn	od of Payment of Fees
	Attached is a check in the amount of \$ This form is
	submitted in duplicate.
\boxtimes	Charge Deposit Account No. 50-1275 in the amount of \$180.00. This form is
	submitted in duplicate.
\boxtimes	Please charge any deficiency or credit any overnayment to Denosit Account

50-1275.

No fee or Statement is required under 37 C.F.R. § 1.97(b).

Respectfully submitted,

Paul K. Legaard, Ph.D. Registration No. 38,534

Dated: 14 SUPTEMBER 2004

COZEN O'CONNOR, P.C. 1900 Market Street, 5th Floor Philadelphia, PA 19103-3508 (215) 665-2000 – Telephone (215) 701-2013 - Facsimile

PTO/SB/08A (10-01)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

				are required to respond to a consection of	DI INDITTRAJUTI UNIESS IL CONTAINS A VAIID ONID CONTO	THUSTINE			
Substitut	te for form 1449A/P	Er.	ADEMARKOR		Complete if Known				
		OF	ADEMARK	Application Number	09/479,783				
INFORMATION DISCLOSURE				Filing Date	January 7, 2000				
STATEMENT BY APPLICANT			PPLICANT	First Named Inventor	Stanley T. Crooke				
				Group Art Unit	1635				
(use as many sheets as necessary)			necessary)	Examiner Name	Sean McGarry				
Sheet	1	of	2	Attorney Docket Number	ISIS0002-102 (ISIS-4313)				

	0.11	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of	Pages, Columns, Lines, Where Relevan
Examiner Initials *	Cite No.¹	Number - Kind Code ² (if known)		Cited Document	Passages or Relevant Figures Appear
	AO	US-6,107,094	08/22/2000	Crooke	
		US-			
		US-	•		
		US-			
	1	US-			

	FOREIGN PATENT DOCUMENTS								
Examiner	Cite	Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines, Where Relevant				
Initials*	No.1	Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	T ⁶			

Examiner Signature		Date Considered	

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional) . ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.
³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

PTO/SB/08B(10-01)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

5, no persons are required to respond to a collection of information unless it contains a valid OMB control number TRADE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known **Application Number** 09/479,783 Filing Date January 7, 2000 First Named Inventor Stanley T. Crooke Group Art Unit 1635 **Examiner Name** Sean McGarry ISIS0002-102 (ISIS-4313) Attorney Docket Number

(use as many sheets as necessary)

Substitute for form 1449A/PTO

Sheet of

		OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2
	АР	Struck, "Vaccine R&D Success Rates And Development Times," <i>Nature Biotechnology</i> , May 1996, Vol. 14, pp. 591-593.	
	AQ	Ohtsuka et al., "Recognition By Restriction Endonuclease <i>EcoRI</i> Of Deoxyoctanucleotides Containing Modified Sugar Moieties," <i>J. Biochem</i> , 1984, Vol. 139, pp. 447-450.	
	AR	International Search Report Dated August 23, 2004 for International Application No. PCT/US03/09808.	

1	Examiner	 Date	
١	Signature	Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

¹ Unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.